

# CHAPTER 1

## ADMINISTRATION

### INTRODUCTORY STATEMENT

The *New York City Energy Conservation Code* (“NYCECC”) is comprised of the *New York State Energy Code* (“NYSEC”) with amendments as enacted into law by the New York City Council.

The NYCECC is divided into provisions relevant to commercial buildings and provisions relevant to residential buildings as follows:

1. The provisions of the NYCECC for commercial buildings are reflected in the state publications incorporated by reference in 19 NYCRR section 1240.4, as amended by sections 28-1001.2.1 and 28-1001.2.2 of the *Administrative Code* of the city of New York. Such state publications include (i) Chapters 1 [CE], 2 [CE], 3 [CE], 4 [CE], 5 [CE] and 6 [CE] of the 2015 edition of the *International Energy Conservation Code* (the “2015 IECC”), as amended by Part 1 of the publication entitled the 2016 Supplement to the *New York State Energy Conservation Construction Code* (the “2016 Energy Code Supplement”) (ii) the July 2014 edition of “Energy Standard for Buildings Except Low-Rise Residential Buildings” (“ASHRAE 90.1-2013”), as amended by Part 2 of the 2016 Energy Code Supplement; and (iii) reference standards incorporated by reference in 19 NYCRR section 1240.4(c).
2. The provisions of the NYCECC for residential buildings are reflected in the state publications incorporated by reference in 19 NYCRR section 1240.5, as amended by sections 28-1001.2.1 and 28-1001.2.2 of the *Administrative Code* of the city of New York. Such state publications include (i) Chapters 1 [RE], 2 [RE], 3 [RE], 4 [RE], 5 [RE] and 6 [RE] of the 2015 edition of the *International Energy Conservation Code* (the “2015 IECC”), as amended by Part 3 of the publication entitled the 2016 Supplement to the *New York State Energy Conservation Construction Code* (the “2016 Energy Code Supplement”); and (ii) the referenced standards incorporated by reference in 19 NYCRR section 1240.5(b), as amended by Part 3 of the 2016 Energy Code Supplement.

### SECTION ECC 101

#### SCOPE AND GENERAL REQUIREMENTS

**101.1 General.** These provisions shall be known and cited as the “*New York City Energy Conservation Code*,” “NYCECC” or “ECC,” and are referred to herein as “this code.” All section numbers in this code shall be deemed to be preceded by the designation “ECC.” Administration and enforcement of this code shall be in accordance with Title 28 of the *Administrative Code*.

**101.1.1 Titles.** The 2015 edition of the *International Energy Code* shall be known as the “2015 IECC.”

The 2013 edition of the Energy Standard for Buildings Except Low-Rise Residential Buildings shall be known as “ASHRAE 90.1-2013.” All references in this code to ASHRAE 90.1-2013 shall be deemed to be references to ASHRAE 90.1-2013 (AS AMENDED).

The 2016 Energy Code Supplement to the *New York State Energy Conservation Construction Code* shall be known as the “2016 Supplement.”

The *New York State Energy Conservation Construction Code* along with the New York City amendments to the *New York State Energy Conservation Construction Code* shall be known collectively as the “*New York City Energy Conservation Code*.”

**101.2 Scope.** This code applies to commercial buildings and residential buildings, as defined in Chapter C2 and Chapter R2 of this code, and the buildings’ sites, associated systems and equipment.

**101.2.1 Occupancy classifications.** For determination of occupancy classification and use within this code, a comparable occupancy classification shall be made to the *New York City Building Code*.

**101.2.2 Reconciliation with *New York State Energy Conservation Construction Code*.** Whenever any provision of the *New York State Energy Conservation Construction Code* provides for a more stringent requirement than imposed by this code, the more stringent requirement shall govern.

**101.2.3 Other laws.** The provisions of this code shall not be deemed to nullify any federal, state or local law, rule or regulation relating to any matter as to which this code does not provide.

**101.3 Intent.** This code shall regulate the design and construction of buildings for the use and conservation of energy over the life of each building. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this objective. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes. To the fullest extent feasible, use of modern technical methods, devices and improvements that tend to minimize consumption of energy without abridging reasonable requirements for the safety, health and security of the occupants or users of buildings shall be permitted. As far as may be practicable, the improvement of energy conservation construction practices, methods, equipment, materials and techniques shall be encouraged.

**101.4 Applicability.** The provisions of this code shall apply to the construction of buildings. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

**101.4.1 Mixed occupancy.** Where a building includes both commercial and residential occupancies, each occupancy shall be separately considered and shall meet the applicable provisions of Chapters C2, C3, C4 and C5 for commercial, and Chapters R2, R3, R4, and R5 for residential.

**101.5 Compliance.** Commercial buildings shall comply with the provisions of this code applicable to commercial buildings in Chapters C2, C3, C4, and C5. Residential buildings shall comply with the provisions of this code applicable to residential buildings in Chapters R2, R3, R4, and R5.

**101.5.1 Compliance materials.** Compliance with the provisions of this code can be demonstrated through the use of computer software deemed acceptable by the New York State Secretary of State, and the commissioner.

**101.5.2 Demonstration of compliance.** For a building project application or applications required to be submitted to the department, the following documentation, as further described in the rules of the department, shall be required in order to demonstrate compliance with this code.

**101.5.2.1 Professional statement.** Any registered design professional or lead energy professional filing an application or applications for a new building or alteration project shall provide on a signed and sealed drawing a statement of compliance or exemption in accordance with the rules of the department.

**101.5.2.2 Energy analysis.** For any application that is not exempt from this code and for which a work permit is required in accordance with Section 28-105 of the *Administrative Code*, an energy analysis shall be provided on a sheet or sheets within the construction drawing set. The energy analysis shall identify the compliance path followed, demonstrate how the design complies with this code and be in a format as prescribed in the rules of the department. The energy analysis shall meet the requirements of this code for the entire project. Projects that utilize trade-offs among disciplines shall use DOE2-based energy modeling programs or other energy-modeling programs as prescribed in the rules of the department and shall be signed and sealed by a lead energy professional.

**101.5.2.3 Supporting documentation.** For any application that is not exempt from this code and for which a work permit is required in accordance with Section 28-105 of the *Administrative Code*, supporting documentation shall be required in the approved construction drawings. See Section 103 for further requirements.

## **SECTION ECC 102 ALTERNATE MATERIALS, METHOD OF CONSTRUCTION, DESIGN OR INSULATING SYSTEMS**

**102.1 General.** This code is not intended to prevent the use of any material, method of construction, design or insulating system not specifically prescribed herein, provided that such material, method of construction, design or insulating system has been approved by the commissioner as (1) meeting the intent of this code, (2) achieving energy savings that are equivalent to or greater than would be achieved using prescribed materials, methods of construction, designs or insulating systems, and (3) meeting the requirements of Article 113 of Chapter 1 of Title 28 of the *Administrative Code* and the remaining *New York City Construction Codes*.

## **SECTION ECC 103 CONSTRUCTION DOCUMENTS**

**103.1 General.** Construction documents shall be prepared in accordance with the provisions of Chapter 1 of Title 28 of the *Administrative Code*, the *New York City Construction Codes*, including this code, and the rules of the department.

**103.2 Supporting documentation on construction documents.** Supporting documentation shall include those construction documents that demonstrate compliance with this code.

**103.2.1 Intent.** Supporting documentation shall accomplish the following:

1. Demonstrate conformance of approved drawings to the energy analysis for every element and value of the energy analysis;
2. Demonstrate conformance of approved drawings to other mandatory requirements of this code, including, but not limited to, sealing against air leakage from the building envelope and from ductwork as applicable, insulation of ducts and piping as applicable, mechanical and lighting controls with devices shown and operational narratives for each, and additional requirements as set forth in this section;
3. Identify required progress inspections in accordance with the scope of work, this

code, the *Administrative Code*, the *New York City Building Code*, and the rules of the department; and

4. Comply with other requirements as may be set forth in the rules of the department.

**103.2.2 Detailed requirements.** Construction documents shall be drawn to scale upon suitable material. Electronic media documents are permitted to be submitted in accordance with department procedures. Construction documents for a project shall be fully coordinated and of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in sufficient detail pertinent data and features of the building, building systems and equipment as herein governed. Details shall include, but are not limited to, as applicable, insulation materials and their R-values; fenestration U-factors and SHGCs; area-weighted U-factor and SHGC calculations; mechanical system design criteria; mechanical and service water heating system and equipment, types, sizes and efficiencies; economizer description; equipment and systems controls; fan motor horsepower and controls; duct sealing, duct and pipe insulation and location; lighting fixture schedule with wattages and control narrative; location of daylight zone on floor plans (as applicable), and air sealing details. The building's thermal envelope shall be represented on the construction documents.

**103.3 Examination of documents.** In accordance with Article 104 of Chapter 1 of Title 28 of the *Administrative Code*, the department shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws, rules and regulations.

**103.4 Changes during construction.** For changes during construction refer to Section 28-104.3 of the *Administrative Code*.

## **SECTION ECC 104 INSPECTIONS**

**104.1 General.** Except as otherwise specifically provided, inspections required by this code or by the department during the progress of work may be performed on behalf of the owner by an approved agency. All inspections shall be performed at the sole cost and expense of the owner. Refer to Article 116 of Chapter 1 of Title 28 of the *Administrative Code* for additional provisions relating to inspections. In addition to any inspections otherwise required by this code or the rules of the department, the following inspections shall be required:

1. **Progress inspections.** Progress inspections shall be performed in accordance with the rules of the department.
2. **Final inspection.** Refer to Article 116 of Chapter 1 of Title 28 of the *Administrative Code* and the rules of the department.
3. **Issuance of Certificate of Compliance.** Refer to Section 28-116.4.1 of the *Administrative Code*.

The requirements of Section 104.1 shall not be read to prohibit the operation of any heating equipment or appliances installed to replace existing heating equipment or appliances serving an occupied portion of a structure provided that a request for inspection of such heating equipment or appliances has been filed with the department not more than 48 hours after such replacement work is completed, and before any portion of such equipment or appliances is concealed by any permanent portion of the structure.

**104.1.1 Approved agencies.** Refer to Article 114 of Chapter 1 of Title 28 of the *Administrative Code* and the rules of the department.

**104.1.2 Inspection of prefabricated construction assemblies.** Prior to the issuance of a work permit for a prefabricated construction assembly having concealed mechanical work, the department shall require the submittal of an evaluation report by the manufacturer or approved agency on each prefabricated construction assembly, indicating the complete details of the mechanical system, including a description of the system and its components, the basis upon which the system is being evaluated for energy use, test results and similar information, and other data as necessary for the commissioner to determine conformance to this code.

**104.1.2.1 Test and inspection records.** Required test and inspection records shall be made available to the commissioner at all times during the fabrication of the mechanical system and the erection of the building; or such records as the commissioner designates shall be filed.

**104.2 Testing.** Envelope, heating, ventilating, air conditioning, service water heating, lighting and electrical systems shall be tested as required in this code and in accordance with Sections 104.2.1 through 104.2.3. Except as otherwise required in this code or in the rules of the department, tests shall be made by the permit holder and witnessed by an approved agency.

**104.2.1 New, altered, extended, renovated or repaired systems.** New envelope, heating, ventilating, air conditioning, service water heating, lighting and electrical installations or systems, and parts of existing systems that have been altered, extended, renovated or repaired, shall be tested as prescribed herein or in the rules of the department to disclose leaks and defects.

**104.2.2 Apparatus, instruments, material and labor for tests.** Apparatus, instruments, material and labor required for testing an envelope, heating, ventilating, air conditioning, service water heating, lighting and/or electrical installation or system or part thereof shall be furnished by the permit holder.

**104.2.3 Reinspection and testing.** Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with the *New York City Construction Codes*, including this code. The work or installation shall then be reinspected or retested by the approved agency.

**104.3 Sign-off of completed work.** In addition to the requirements of Article 116 of Chapter 1 of Title 28 of the *Administrative Code*, Section 103.4 of this code and other requirements for sign-off, the project team shall either certify that construction does not differ from the last approved energy analysis or provide a whole-project as-built energy analysis and supporting documents, signed and sealed, for approval prior to sign-off. The as-built energy analysis and supporting documents shall reflect the materials, equipment and values actually used in the construction of the project, and shall demonstrate compliance of the constructed project with this code. Such signed and sealed documents may be accepted with less than full examination by the department based on the professional certification of the registered design professional.

**104.4 Temporary connection.** The commissioner shall have the authority to allow the temporary connection of an installation to the sources of energy for the purpose of testing the installation or for use under a temporary certificate of occupancy.

## **SECTION ECC 105 REFERENCED STANDARDS**

**105.1 Referenced standards.** The standards referenced in Chapters C2, C3, C4, and C5 of the *New York City Energy Conservation Code* shall be those that are listed in Chapter C6 of the *New York City Energy Conservation Code*, and in the rules of the department and such

standards shall be considered part of the requirements of the commercial provisions of the *New York City Energy Conservation Code* to the prescribed extent of each such reference. The standards referenced in Chapters R2, R3, R4, and R5, of the *New York City Energy Conservation Code* shall be those that are listed in Chapter R6 of the *New York City Energy Conservation Code*, and in the rules of the department and such standards shall be considered part of the requirements of the residential provisions of the *New York City Energy Conservation Code* to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Refer to Article 103 of Chapter 1 of Title 28 of the *Administrative Code* for additional provisions relating to referenced standards.